

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: TAKIZAWA, et al
Serial No.: Not assigned
Filed: January 11, 2002
For: ATM COMMUNICATION TERMINAL AND ATM COMMUNICATION
SYSTEM
Group: 2663
Examiner: T. Nguyen

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

January 11, 2002

Sir:

The following amendments and remarks are respectfully submitted prior to the Rule
53(b) Continuation Application filed on even date.

IN THE SPECIFICATION

Please insert before the first line of the specification the following:

-- This is a continuation of application Serial No. 09/087,510, filed May 29, 1998. --

IN THE CLAIMS

Please cancel claims 1-16 without prejudice or disclaimer of the subject matter
thereof.

Please add new claims 17-22 as follows:

-- 17. A communication terminal which has functions of disassembling multiplexed signals obtained by multiplexing data into cells of fixed length, adding each of the cells with a header containing destination information and transmitting/receiving the cell added to the header through a communication line, comprising:

a discriminator for referring to the destination information of each of cells which are received through the communication line to discriminate, with regard to the cell, whether the cell is addressed to the communication terminal concerned, hereinafter self communication terminal, or communication terminals other than said self-communication terminal,

wherein cells which have been discriminated in said discriminator as being addressed to said self communication terminal are received in said self communication terminal and cells which have been discriminated in said discriminator as being addressed to the communication terminals other than said self-communication terminal are provided for re-multiplexing to the communication terminals other than said self-communication terminal;

a multiplexed signal generator for multiplexing data to be transmitted from said self communication terminal to the communication terminals other than said self-communication terminal so as to generate a multiplexed signal;

a cell-forming unit for forming the multiplexed signal generated in the multiplexed signal generator into a cell;

a cell re-multiplexer for re-multiplexing cells generated by said cell-forming unit and the cells addressed to the communication terminals other than said self-

communication terminal other than said self-communication terminal which have been discriminated in said discriminator; and

bypass means for directly transmitting the received cells when abnormality occurs in said communication terminal.

18. The communication terminal as claimed in claim 17, further comprising first input and output terminals and second input and output terminals, wherein said self communication terminal discriminates and re-multiplexes cells received through said first input terminal through said communication line and then transmits the re-multiplexed cells from said first output terminal, and also discriminates and re-multiplexes cells received through said second input terminal and then transmits the re-multiplexed cells from said second output terminal.

19. A communication terminal for disassembling a multiplexed signal obtained by multiplexing data into cells of fixed length, and transmitting/receiving the multiplexed signal through a communication line, comprising:

a multiplexed signal generator for multiplexing data to be transmitted from said communication terminal, thereby generating a multiplexed signal;

a cell-disassembling unit for disassembling the cells received through said communication line to assemble a multiplexed signal having cells addressed to communication terminals other than said communication terminal based on destination information contained in each of the cells;

a cell multiplexing unit for forming the multiplexed signal assembled and the multiplexed signal generated in said multiplexed signal generator into cells, and transmitting the cells through said communication line; and

bypass means for directly transmitting the received cells when abnormality occurs in said communication terminal.

20. The communication terminal as claimed in claim 19, further comprising:

first and second input terminals and first and second output terminals,

wherein said multiplexing unit cell-multiplexes the multiplexed signal generated thereby and the multiplexed signal corresponding to the cell received through said first input terminal and then transmitting the cell-multiplexed signal through said first output terminal, and cell multiplexes the multiplexed signal generated thereby and the multiplexed signal corresponding to the cell signal received through said second input terminal, and then transmits the cell-multiplexed signal through said second output terminal.

21. A communication terminal having functions of disassembling a multiplexed signal obtained by multiplexing data into cells of fixed length, adding a header containing destination information to each of the cells and transmitting/receiving the cells through a communication line, comprising:

a cell-disassembling unit for disassembling cells received through said communication line and assembling a multiplexed signal for each destination information by referring to destination information;

a multiplexed signal generator for multiplexing data to be transmitted from said communication terminal;

a re-multiplexing unit for re-multiplexing the multiplexed signal generated in said multiplexed signal generator and the multiplexed signals addressed to communication terminals other than said communication terminal in the multiplexed signals assembled; and

a cell-forming unit for forming said re-multiplexed multiplexed signals into cells and transmitting the signals formed into the cells through a communication line; and

bypass means for directly transmitting the received cells when abnormality occurs in said communication terminal.

22. The communication terminal as claimed in claim 12, further comprising:

first and second input and output terminals,

wherein said communication terminal disassembles the cells received from said first input terminal through said communication line and re-multiplexes the multiplexed signals, and transmits the resulting signals from said first output terminal while disassembling the cells received through said second input terminal and re-multiplexing signals and then transmitting the resulting signals from said second input terminal. --


REMARKS

Entry of the above amendments prior to examination is respectfully requested.

Please charge any shortage in fees due in connection with the filing of this paper, or credit any overpayment of fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (566.36297CX1).

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP



Carl I. Brundage
Registration No. 29,621

CIB/jdc
(703) 312-6600